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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/815,584

03/23/2001

Joshua I. Pine

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EXAMINER

AZARIAN, SEYED H

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 07/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/815,584

Applicant(s)

PINE, JOSHUA I.

Examiner

Seyed Azarian

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 10-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirsten (U.S. patent 5,724,475).

Regarding claim 1, Kirsten discloses an imaging system comprising; an image capture circuit (column 2, lines 63-67, video recording);

image processing circuitry, coupled to the image capture circuit, that is operable at a first rate and a second rate (column 10, lines 29-48, multiple asynchronous sources according to two switching alternatives. A first switching alternative at average rates, and second switching alternative offeres an increase in a rate (second rate));

the image processing circuitry operating at the first rate to perform a first stage of image processing (column 3, line 63 through column 4, line 10, video field with fixed-view, low motion content images, which produce a variable rate);

the image processing circuit operating at the second rate to perform a second stage of image processing (column 4, lines 24-33, an additional rate);

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and at least one of the first rate and the second rate being adjustable (column 16, lines 50-59, rate control).

Regarding claim 10, Kirsten discloses an electronic imager, the electronic imager performing processing on an acquired image, the electronic imager comprising (column 2, lines 63-67, video recording);

a plurality of functional processing circuits, the functional processing circuits comprising (column 3, lines 15-20);

an acquisition circuit that produces signals in response to incident light from an acquired image (column 9, lines 28-39, signal from the acquisition controller);

an interface circuit communicatively coupled to the acquisition circuit, that produces a raw image data set from the signals collected by the acquisition circuit (see claim 1, also column 9, lines 39-44);

a processing circuit that produces a processed image data set from the raw image set, and an intermediate image storage buffer communicatively coupled to the processing circuit, that stores one or more image data sets (see claim 2, also column 9, lines 44-52, media storage devices);

and one or more of the plurality of functional processing circuits altering its particular operational speed in response to the amount of image data sets contained in the intermediate storage buffer (column 16, lines 50-59, rate control or (altering speed), also column 21, lines 38-49, storage media and the capacity over fill target is chosen as function of the loop response speed).

Regarding claim 12, Kirsten discloses the electronic imager of claim 11 wherein the processing circuit slows when the amount of raw image data sets exceeds a predetermined threshold (column 15, lines 40-49, exceeds a certain threshold).

Regarding claim 15, Kirsten discloses the electronic imager of claim 10, the functional processing circuits further comprising a transformation circuitry, communicatively coupled to the processing circuitry, that produces a final data image set from a processed data image set (Fig. 20, column 21, lines 38-49).

Regarding claims 11, 13-14 and 16-18, it recites similar limitation as claims 10 and 12, are similarly analyzed.

Regarding claims 20-23, it recites similar limitation as claims 12 and 15, are similarly analyzed.

Regarding claims 19 and 24-27, it recites similar limitation as claims 10 and 12, are similarly analyzed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirsten (U.S. patent 5,724,475) in view of Schaefer et al (U.S. patent 6,490,000).

Regarding claim 2, Kirsten discloses the communicatively coupled to the image processing circuitry, that stores representations of a plurality of images having undergone the first stage of image processing in anticipation of the second stage of image processing (see claim 1, also column 17, lines 10-29, storage sub-system).

However Kirsten fails to disclose, "comprising an intermediate storage queue". On the other hand Schaefer in the same field of video camera teaches method and apparatus to delay the display of television programming, broadcast video and audio signals are placed in a first-in/first-out storage queue to enable the control of the playback of the original video signal (column 1, lines 53-65).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made, to modify Kirsten invention according to the teaching of Schaefer because it provides programming for delaying the display by passing incoming video and audio signals through a queue before routing them to an output device, which can easily be implemented in an images device such as video camera.

Regarding claim 3, Kirsten discloses the imaging system of claim 2 wherein the second rate is adjusted based on the content of the intermediate storage queue (see claim 2, also column 4, lines 24-34, a "rate control" system, which images are captured in order to fill storage capacity. An additional rate control feature anticipates daily (second rate)).

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Regarding claim 5, Kirsten discloses the imaging system of claim 2 wherein the second rate is adjusted down when the intermediate storage queue contains less than a predetermined amount of image data (column 15, lines 24-39, storage is running at less than full capacity).

Regarding claim 6, Kirsten discloses the imaging system of claim 2 wherein the first rate is adjusted to zero when the intermediate storage queue is at least almost full (Fig. 18, column 21, lines 25-37, storage data system).

Regarding claim 7, Kirsten discloses the imaging system of claim 2 wherein the second rate is adjusted to a maximum rate when the intermediate storage queue is at least almost full (column 14, lines 32-54, maximum rate).

Regarding claim 8, Kirsten discloses the imaging system of claim 2 wherein the first rate is adjusted to a low rate when the intermediate storage queue contains more than a predetermined amount of image data (column 15, lines 1-11, lower rate).

Regarding claim 9, Kirsten discloses the imaging system of claim 2 wherein the second rate is adjusted to a high rate when the intermediate storage queue contains more than a predetermined amount of image data (column 24, lines 14-26, high base data rate).

Regarding claim 4, it recites similar limitation as claims 2 and 3, are similarly analyzed.

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent (4,198,656) to Mathisen is cited for video sequencer.

U.S. patent (6,271,884) to Chung et al is cited for image flicker reduction with fluorescent lighting.

U.S. patent (6,202,165) to Pine is cited for photonic distribution method and apparatus for electronic systems.

U.S. patent (6,661,846) to Ota is cited for adaptive clocking mechanism for digital video decoder.

U.S. patent (6,714,260) to Pine is cited for monolithic generation of RF for wireless transmission of video.

U.S. patent (6,252,850) to Lauret is cited for adaptive digital clock recovery.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Seyed Azarian

Patent Examiner

Group Art Unit 2625

July 5, 2004



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